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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,582	01/22/2002	Danny L. Beasley	218063US25CO	4130

22850 7590 02/26/2003

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EXAMINER

DINH, DUNG C

ART UNIT PAPER NUMBER

2153

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/683,582

Applicant(s)

BEASLEY ET AL.

Examiner

Dung Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Claim 40, line 2, "the serial data packet" lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27, 30-32, 34, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradley et al. US patent 5,309,564.

As per claim 27, Bradley a system for connecting workstation having input device and video monitor to plural remote computer systems [see fig.2A, B & C] comprising:

a first signal conditioning device [fig.2B interface 23, 24] receiving a first set of electronic signals produced by the user-input device;

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a first communication link coupled to the first signal conditioning device for carrying the first set of electronic signals [communication links #1 to #2N];

a crosspoint switch [fig.2A] including a number of outputs [21], the crosspoint switch transferring information from the communication link [cable 9] to at least one of the outputs;

a plurality of second communication links [21] coupled to the crosspoint switch; and

a plurality of second signal conditioning devices [fig.2C interface 25's] coupled to the remote computers, where the interface received electronics signal from the user-input devices to the corresponding computer, the second signal conditioning devices received analog video signals produced by the computer and transmit the analog video signals to the crosspoint switch [col.7 lines 36-45].

As per claims 30-32, Bradley teaches the video having red, green and blue component and encoding the horizontal and vertical synchronization signals on the video components [col.8 lines 58-65].

As per claims 34, Bradley teaches the first signal conditioning device having decoder [demodulator] for removing the video synchronization signals [col.11 lines 1-10].

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As per claim 43, Bradley teaches a switching system comprising:

computer side connectors [apparent from fig.2C] including plural user-input device connectors and video connectors

a first set of user side connectors [fig.4A #23] including user-input device connector and video connector for physically connecting to independent dedicated cables of a user-input device and analog video input of a monitor;

a first analog video receiving circuit [fig.3A Modulator 40] interposes between the computer-side connector and the user-side connector for receiving analog video signal from the computer through the computer side connectors, the analog video signals including synchronization signals encoded on one of the red, green and blue component thereof [col.9 lines 20-30];

a synchronization decoding circuit and analog video output [fig.4A Demodulator 60] to the first monitor [54] via the user-side video connector.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit as disclosed on page 2 of "PolyCon Management System Order Catalog" (prior art submitted by applicant - paper #4) and further in view of Masahiko Japan patent JP406284118A.

As per claim 27, the PolyCon/XS is a system for connecting workstations comprising:

a first device for receiving a first set of electronics signals produced by a user input device [a port on the Polycon/XS that connects to a console];

communication link for carrying information corresponding to the first set of electronic signals [the cable that would be connect from the port on the Polycon/XS to the console];

a crosspoint switch including a number of outputs [matrix switching unit];

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a plurality of second communication links [cables that connect the computers to be controlled to the Polycon/XS] that carry signals produced by the input device to a selected computer and video signal from the selected computers to the crosspoint switch.

The Polycon/XS as described in the catalog does not specifically disclose signal conditioning devices in connected to the switch and the computers. It is well known in the art to have signal conditioning devices to amplify and reshape signal to enable transmission over long cables. Masahiko, for example, teaches a conditioning circuit to suppress jitter to enable transmission of the signal in a long distance cable. It would have been obvious for one of ordinary skill in the art to have signal conditioning devices at the switch and the computers because it would have enable usage of longer cables for connecting the computers to the switch; hence extending the distance between computers and switch.

As per claim 28-29, the Polycon/XS provides support for plural control consoles connected to the switch with each console able to command the switch to select a computer to be controlled. Hence, it is apparent that the system as modified would have means for receiving electronic signals for controlling the switch.

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As per claims 29-36, it is well known in the art that computer video output has red, green and blue and synchronization signals. It is well known in the art that to encode horizontal and vertical synchronization signals are encoded on at least one of the red, green and blue signals prior to transmission. It is apparent that the Polycon/XS system has provides the red, green and blue video encoded with the synchronization signals before transmitting to the switch. It would have been obvious for one of ordinary skill in the art to do so because it would have enabled the video signal to be transmitted over longer cable. It is apparent that the synchronization signals polarities would have been encoded in the transmission signal in order for the receiving end to decode and extract the synchronization signals.

As per claim 38-40, the Polycon/XS system has input device comprises keyboard and mouse [see page 1 of the catalog]. The keyboard and mouse data are transmitted from the workstation [control console] to the computer being controlled.

Claims 37, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit and Masahiko above and further in view of Choi et al US patent 5,673,087.

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As per claims 37, 41-42, the Polycons/XS as described in the catalog does not specifically disclose onscreen programming circuit. Choi teaches a device with circuit for producing an on screen display (OSD) with menu and cursor control. The circuit enable simplify operational control of the device. It would have been obvious for one of ordinary skill in the art to modify the Polycon/XS device to have OSD circuitry because it would have simply operational control of the device.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit as disclosed on page 2 of "PolyCon Management System Order Catalog" (prior art submitted by applicant - paper #4) and further in view of Bradley et al. US 5,309,564.

As per claim 43, the PolyCon/XS is a switching system with plural computer-side connectors and plural user-side connectors connecting to computers and user-input devices via dedicated cables. The PolyCon/XS reference does not specifically disclose encoding video synchronization signals on one of the red, green or blue video component. Encoding synch signal on one of the video component for transmission is well known in the art. It is apparent that the Polycon/XS would have this feature. Bradley teaches a method for transmitting video output from a

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computer by encoding the vertical synch on the green component and horizontal synch on the blue component. It would have been obvious for one of ordinary skill in the art to combine the teaching of Bradley to the Polycon/XS system because it would have enable transmission of the video over long cable. It is apparent that the system as modified would have circuitry to decode and extract the synchronization signals.

Claims 1 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit as disclosed on page 2 of "PolyCon Management System Order Catalog" (prior art submitted by applicant - paper #4) and further in view of Choi et al. US patent 5,673,087.

As per claims 1, and 44, The PolyCon/XS is a switching system essentially as claimed having plural computer-side connectors and plural user-side connectors for connecting mouse, keyboard and analog video signals. The PolyCon lacks the analog video overlay circuitry to create on screen menu for controlling the switch. Choi teaches a device with circuit for creating on screen display with menu to simply operational control of the device [col.6 lines 34-37]. Hence, one of ordinary skill in the art would have motivated to provide on screen display circuitry in the PolyCon/XS system because it would have improved operational control of the switch.

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Claims 2-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over PolyCon/XS Matrix Control Unit as disclosed on page 2 of "PolyCon Management System Order Catalog" and Choi and further in view of Bladley et al. US patent 5,309,564.

The PolyCon/XS reference does not disclose details of signals transmission. Bladley, in similar field of invention, teaches a switching system for remote usage of computers which transmits analog video from remote computer with synchronization signals encoded on the components of the computer RGB video signals. It would have been obvious for one of ordinary skill in the art to apply the transmission encoding method of Bladley to the PolyCon/XS system because it would have enable the signals to be transmitted over longer distances. It is apparent that the system as modified would have connectors, decoder and encoder circuitry.

Claim Rejections - Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patents No. 6,345,323; 6,112,264; 5,884,096; 5,721,842. Although the conflicting claims are not identical, they are not patentably distinct from each others because the current claimed limitations are claimed within each of the patents above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action

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is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 746-7238, (for formal communications; please mark "EXPEDITED PROCEDURE")

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).


Dung C. Dinh
Primary Examiner